

## What is a liver transplant ?

Liver transplantation involves transplanting the liver from one person to another.

This is done when the liver's function is reduced (compromised) in such a way that the life of the patient is threatened. Patients are referred by their doctor to a transplant center for evaluation.

Donor organs can be obtained in two ways:

- Cadaveric donor organs are taken from those patients who are declared brain dead. Organs from these individuals are retrieved as quickly as possible, packed in a preservation solution and ice and shipped to their destination as quickly as possible. The main requirements are that the donor be of a compatible blood type and the donor liver be an appropriate size. No other matching is necessary.
- In a living donor liver transplant, a segment of the liver is donated from a healthy person to the transplant patient. This can be done because the liver is the only organ that has the ability to regenerate. Both the segment that was donated and the remaining section of the donor liver will grow to normal size within weeks. Parents, siblings and other relatives are eligible to donate organs to family members. Unrelated donors may also donate a portion of their liver if they prove to be a match for the recipient.

Potential donors and recipients undergo a comprehensive evaluation, including a psychiatric assessment to ensure that they are comfortable with their decision. One year survival rates for liver transplant patients are 85.3% - 88.1%.

## When are liver transplants needed?

Many diseases are capable of compromising the liver's function sufficiently to threaten a patient's life. Most of these diseases are potentially treatable with liver transplantation. Cirrhosis, which is the death of liver cells due to a variety of causes, is one of the most common reasons for liver transplantation. Cirrhosis due to hepatitis C is currently the leading cause for liver transplantation.

Those people who develop cirrhosis of the liver due to excessive use of alcohol can avoid needing a liver transplant. Abstinence from alcohol and treatment of its complications will usually allow them to live for prolonged periods of time.

Most cancers of the liver begin somewhere else in the body and spread there. These cancers are not curable with a liver transplant. Transplantation at an early stage of primary liver cancer may result in long-term survival for some patients (if the tumors have not spread to other organs). However, cancerous tumors that start in the liver often spread to other organs by the time they are detected, and are rarely cured by liver transplantation.

## What are the risks involved in liver transplantation?

Before surgery, the risks are mainly the development of some acute complication of the liver disease, which may cause the patient to be unacceptable for surgery.

There are risks common to all forms of major surgery, as well as technical difficulties in removing the diseased liver and implanting the donor liver. One of the major risks for the

patient is not having any liver function for a brief period. Immediately after surgery, bleeding, poor function of the grafted liver, and infections are major risks. The patient is then carefully monitored over their lifetime for signs of rejection of the liver.

## What are the side effects of a liver transplant?

Patients commonly experience side effects from the drugs used to treat or prevent rejection. All the drugs used for rejections increase the person's susceptibility to infections. Various medicines are used, and each has its own effects. Cortisone-like drugs produce some fluid retention and puffiness of the face, risk of worsening diabetes and osteoporosis. Cyclosporine (an immunosuppressant) produces some tendency to develop high blood pressure and the growth of body hair. The dose of this medication must be very carefully regulated. Kidney damage may occur from cyclosporine, but this can usually be avoided by monitoring the drug levels in the blood. Common side effects for FK-506 include headaches, tremors, diarrhea, increased tension, nausea, increased levels of potassium and glucose, and kidney dysfunction.

## What are the lifestyle changes associated with liver transplantation?

Routine follow-up consists of monthly blood tests, measuring of blood pressure by a local physician, and annual or semi-annual checkups at the transplant center.

Most patients are able to return to a normal or near-normal lifestyle and can participate in fairly vigorous physical exercise six-to-twelve months

after a successful liver transplant.

Transplant recipients should avoid possible exposure to infections as their immune system is depressed. Illness should be reported to the doctor immediately and medicine taken only under medical supervision.

Women who undergo liver transplantation can conceive and give birth normally, although they have to be monitored carefully because of a higher incidence of premature births. Mothers are advised against nursing babies because of the possibility of immunosuppressive drugs being ingested by the infants through breast milk.

Patients should maintain a balanced diet and are advised to lower their intake of salt to help reduce water retention in the body.

Thousands of lives depend upon organ and tissue transplants, but there is a severe shortage. Currently, there are over 80,000 children and adults waiting for organs to become available, and this number increases each year. The medical miracle of transplantation depends on donated organs. Please consider becoming an organ and tissue donor. Give the most important gift of all - the gift of life.

Please donate to the American Liver Foundation. Your contribution can make a difference to the 25,000,000 Americans who have been afflicted by liver disease.



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The American Liver Foundation is a nonprofit, national health organization dedicated to the prevention, treatment, and cure of hepatitis and other liver diseases through research, education, and advocacy.

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# FACTS ON LIVER TRANSPLANTATION

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depend upon organ and  
tissue transplants."**